

Quality Assurance - Appendix A

Definitions and Acronyms

Definitions

The following definitions clarify the terminology used in this document.

Independent Assurance (IA): An unbiased evaluation of all sampling and testing procedures and equipment used in the acceptance program. The results of IA tests are not used as a basis of material acceptance.

Independent Sample: A individual sample drawn, at random, from a lot of material which can be used in the IAP to validate technician test procedures through limited observations.

Dispute Resolution: The procedure for resolving conflicts that may impact payment between UDOT and Contractors.

Lot: The total production that occurs in a given day.

Materials Acceptance Program (MAP): All factors that UDOT uses to determine the quality of the highway products specified in a contract. These factors include verification sampling, testing, and inspection.

Proficiency Samples: Similar samples tested by two or more laboratories. The test results are statistically compared to assure the laboratories are obtaining the same results.

Quality Assurance (QA): All actions taken to assure a product or service will meet the quality requirements of a project's plans and specifications.

Quality Control (QC): All activities performed by the Contractor to assure a product meets contract specifications. These activities include materials handling and construction procedures, calibration and maintenance of equipment, production process control, sampling, testing, and inspection.

Quality Control Plan: A detailed document describing the type and frequency of inspection, sampling, and testing necessary to meet UDOT specifications. This document is submitted by the contractor for approval during the pre-construction conference.

Qualified Laboratories: Laboratories approved by UDOT for sampling and testing of materials. The laboratory qualification program requires frequent test equipment checks and laboratory records of calibration checks.

Qualified Personnel: Personnel qualified through UDOT programs to perform acceptance or quality control sampling and testing for UDOT or a Contractor.

Random Sample: A sample drawn from a lot in which each increment in the lot has an equal probability of being chosen. All samples used for quality control and verification sampling and testing will be random samples.

Split Sample: A sample drawn, at random, from a lot of material which is then split in equal portions and tested by separate and independent personnel and laboratories. Split samples are used in the IAP to validate the tester, test procedures and testing equipment.

Supplier(s): Those entities providing materials and work for the completion of highway or transportation work. Suppliers include the contractor and all subcontractors.

Target Value: The most desirable value for a characteristic of a product.

Vendor: A supplier of project material that is not the contractor.

Verification Testing: Sampling and testing that validates the quality of a product. Verification sampling and testing are performed by qualified personnel excluding the contractor and vendor.

Acronyms

AAP - AASHTO Accreditation Program

AASHTO - American Association of State Highway and Transportation Officials

ACI - American Concrete Institute

AMRL - AASHTO Materials Reference Laboratory

ASTM - American Society for Testing and Materials

CCRL - Cement and Concrete Reference Laboratory

FHWA - Federal Highway Administration

IAP - Independent Assurance Program

IAST - Independent Assurance Sampling and Testing

LQP - Laboratory Qualification Program

MAP - Materials Acceptance Program

QAP - Quality Assurance Program

QAS - Quality Assurance Section

SHA - State Highway Agency

TTQP - Technician Training and Qualification Program

WAQTC - Western Alliance for Quality Transportation Construction